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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,082	10/10/2001	Katsuhiro Ishii	110671	4514

7590 11/13/2006

Oliff & Berridge
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Alexandria, VA 22320

EXAMINER	
KARKHANIS, AASHISH	

ART UNIT	PAPER NUMBER
3714	

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/937,082	ISHII, KATSUHIRO	
	Examiner	Art Unit	
	Aashish Karkhanis	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-10,12-19 and 21-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-10,12-19 and 21-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 3 – 10, 12 – 19 and 21 – 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Ghosh et al. (U.S. Patent 4,498,079).

Regarding Claims 1, 5 – 7, 10, 12 – 17 and 23 – 26, Ghosh discloses a game system performing image generation including a memory which stores a program and data for image generating (col. 2, lins. 48 – 52), and at least one processor which is connected to the memory and performs processing for image generating (col. 2, lins. 16 – 22) including an intermediate buffer drawing section which temporarily draws an image of a geometry processed object in an intermediate buffer in place of drawing the image in a frame buffer and a frame buffer drawing section which draws the image of the geometry processed object drawn in the intermediate buffer from the intermediate buffer into the frame buffer (col. 15, lins. 58 – 68; col. 16, lins. 1 – 14; where a foreground generator and a background generator are each intermediate buffers and a foreground/background selector means is a final frame buffer connected to a display device), where into the frame buffer the frame buffer drawing section draws a primitive surface of which drawing positions are specified based on three-dimensional information of the object (col. 18, lins. 37 – 48; where foreground/background primitives

are drawn based on their three-dimensional positioning either in front of or behind each other) and on which the image of the geometry-processed object drawn in the intermediate buffer is texture-mapped (col. 6, lins. 3 – 7; fig. 22B; where texture information is added to an image within intermediate texture memory through a background generator picture), an image effect section which performs a given image effect processing on the image on the intermediate buffer before the image drawn in the intermediate buffer is drawn in the frame buffer (col. 15, lins. 58 – 68; col. 16, lins. 1 – 14; where a foreground generator and a background generator are each intermediate buffers and a foreground/background selector means is a final frame buffer connected to a display device), an image synthesizing section which synthesizes an image drawn in the intermediate buffer at a present frame with another image drawn in the intermediate buffer at a past frame before the image drawn in the intermediate buffer is drawn in the frame buffer, an image synthesizing section which synthesizes an image drawn in the intermediate buffer with another image drawn in the frame buffer before the image drawn in the intermediate buffer is drawn in the frame buffer (col. 15, lins. 58 – 68; col. 16, lins. 1 – 14; where a foreground generator provides a changing foreground image and a background generator provides a substantially static image which repeats past frames in a current frame), and wherein the intermediate buffer drawing section draws the image of the geometry processed object in the intermediate buffer for each two-frame or each M-frame (M greater than or equal to 3) (col. 5, lins. 10 – 15; where double buffering allows two images to be synthesized in a frame buffer at the same time for output to a video device at different times).

Regarding Claims 3, 19 and 21 – 22, Ghosh discloses a game system wherein when a plurality of primitive surfaces corresponding to a plurality of objects are to be drawn into the game buffer, the frame buffer drawing section performs hidden-surface removal between the primitive surfaces based on the depth values of the respective primitive surfaces and wherein the frame buffer drawing section draws a plurality of primitive surfaces of which drawing positions are specified based on the three-dimensional information of one object into the frame buffer (col. 18, lins. 37 – 48; where foreground/background primitives are drawn based on their three-dimensional positioning either in front of or behind each other, and where objects or portions of objects hidden by another object are not drawn), and makes images texture-mapped over the plurality of primitive surfaces different from one another (col. 6, lins. 3 – 7; fig. 22B; where texture information is added to an image within intermediate texture memory through a background generator picture).

Regarding Claims 9, 18 and 27, Ghosh discloses a game system wherein when the images of plural geometry-processed objects are drawn in the intermediate buffer, the intermediate buffer drawing section draws an image of a K-th object in the intermediate buffer at a N-th frame and draws an image of a L-th object in the intermediate buffer at a (N+1)-th frame without drawing the image of the K-th object in the intermediate buffer (col. 15, lins. 58 – 68; col. 16, lins. 1 – 14; where image data may be provided directly to a display processor for an unspecified frame which may be an (N+1)-th frame with a K-th object, when no foreground information is available and a background image is shown, or image data may be provided to a display processor for

intermediate buffering for an unspecified frame which may be an N-th frame with an L-th object, when a static background image is shown over a changing foreground).

Response to Arguments

2. Applicant's arguments with respect to claims 1, 3 – 10, 12 – 19 and 21 – 27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 4,398,189: Foreground/background buffers.

U.S. Patent 4,691,295: Video pixel combining buffers.

U.S. Patent 4,839,828: Video pixel combining buffers.

U.S. Patent 4,951,229: Video pixel combining buffers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aashish Karkhanis whose telephone number is (571) 272-2774. The examiner can normally be reached on 0800-1630 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on (571) 272-6788. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARK

CORBETT B. COBURN
PRIMARY EXAMINER